APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,157	02/06/2002	Peter D. Hallenbeck	013883-000001	7492

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EXAMINER
LIN, KENNY S

ART UNIT	PAPER NUMBER
2152	

DATE MAILED: 09/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>17 July 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>7-15 and 57-77</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>7-15 and 57-77</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 7-15 and 57-77 are presented for examination. Claims 1-6 and 16-56 are

withdrawn.

Continued Examination Under 37 CFR 1.114

2.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 7/17/2006 has been entered.

Election/Restrictions

3.   This application contains claims 1-6 and 16-56 are drawn to an invention nonelected with

traverse in Paper of 7/25/2005. A complete reply to the final rejection must include cancellation

of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01. This

statement was made on the Non-Final Office Action mailed on 9/26/2005. This is the second

notice.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
subject matter which the applicant regards as his invention.

5.   Claim7-15 and 55-77 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

      a.   The use of the term "a standard meaning" is unclear and indefinite since the

          claims fail to define what the standard meaning is.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
sale in this country, more than one year prior to the date of application for patent in the United States.

7.   Claims 7-15 and 57-68, 70, 72, 74 and 76 are rejected under 35 U.S.C. 102(b) as being

anticipated by Dolin Jr. et al (Dolin), US 5,737,529.

8.   Dolin was cited in the IDS by the applicant.

9.   As per claim 7, Dolin taught the invention as claimed including a machine readable

memory encoded with a data structure for aliasing inputs to provide a single virtual input in a

premises automation system, the data structure comprising:

      a.   A description of a logical relationship (col.11, lines 59-67, col.12, lines 1-23,

          table I, II, III, IX, XI);

    b. A plurality of entries related to a premises to which entries the logical relationship

applies, each entry producing a Boolean result on which the logical relationship

operates to produce a single Boolean outcome for the single virtual input (col.9,

lines 59-67, table I, II, V, IX, XI), each entry further comprising:

        i. At least a first input identifier serving as a first operand (col.11, lines 59-

67, col.12, lines 1-23, table I, II; e.g. temp_in);

        ii. At least one operator (col.11, lines 59-67, col.12, lines 1-23, table I, II; e.g.

when); and

        iii. At least a second operand (col.11, lines 59-67, col.12, lines 1-23, table I,

II; e.g. io_changes(temp_in)); and

Wherein a storage bit corresponds to the single virtual input to represent a

standard meaning for a state of the premises (col.9, lines 59-67, col.12, lines 44-

46, table I, II, V: determining whether temperature is high or low).

10.   As per claim 11, Dolin taught the invention as claimed including a method for aliasing

inputs in a premises automation system, the method comprising:

    a. Producing a plurality of Boolean results, one Boolean result for each of a plurality

of entries related to a premises, each entry further comprising at least a first input

identifier serving as a first operand, at least one operator, and at least a second

-operand (col.11, lines 59-67, col.12, lines 1-23, table I, II, III, V, IX, XI);

      b. Applying a logical relationship to the plurality of Boolean results to produce a single Boolean outcome for a single virtual input (col.9, lines 59-67, col.11, lines 59-67, col.12, lines 1-23, table I, II, III, V, IX, XI); and

      c. Setting a storage bit corresponding the single virtual input to represent a standard meaning for a state of the premises (col.9, lines 59-67, col.12, lines 44-46, table I, II, V, XI).

11.   As per claim 15, Dolin taught the invention as claimed including apparatus for providing a single virtual input in a premises automation system, the apparatus comprising:

      a. Means for producing a plurality of Boolean results, one Boolean result for each of a plurality of entries related to a premises, each entry further comprising at least a first input identifier serving as a first operand, at least one operator, and at least a second operand (col.11, lines 59-67, col.12, lines 1-23, table I, II, III, V, IX, XI);

      b. Means for applying a logical relationship to the plurality of Boolean results to produce a single Boolean outcome for the single virtual input (col.9, lines 59-67, col.11, lines 59-67, col.12, lines 1-23, table I, II, III, V, IX, XI); and

      c. Means for setting a storage bit corresponding to the single virtual input to represent a standard meaning for a state of the premises (col.9, lines 59-67, col.12, lines 44-46, table I, II, V, XI).

12.   As per claim 57, Dolin taught the invention as claimed including an input/output unit for use in premises automation, the input/output unit comprising:

a. A processor for controlling the operation of the I/O unit (col.6, lines 48-56; control cells; col.10, lines 43-63);

b. A plurality of inputs operatively connected to the processor, at least some of the inputs operable receive communication related to a premises from premises-based apparatus (col.6, lines 48-67, col.7, lines 1-2, col.10, lines 43-63, table V); and

c. A memory connected to the processor, the memory encoded with program code to enable the processor to control the operation of the I/O unit to provide input aliasing through a data structure (col.10, lines 43-63) further comprising:

   i. A description of a logical relationship (col.11, lines 59-67, col.12, lines 1-23, tables I, II, III, V, IX, XI);

   ii. A plurality of entries corresponding to the inputs to which entries the logical relationship applies, each entry producing a Boolean result on which the logical relationship operates to produce a single Boolean outcome for a single virtual input (col.9, lines 59-67, table I, II, V, IX, XI), each entry further comprising:

      1. at least a first input identifier serving as a first operand (col.11, lines 59-67, col.12, lines 1-23, table I, II, V);

      2. at least one operator (col.11, lines 59-67, col.12, lines 1-23, table I, II, V); and

      3. at least a second operand (col.11, lines 59-67, col.12, lines 1-23, table I, II, V);

wherein a storage bit corresponding to the virtual input represents a

standard meaning for a state of the premises (col.9, lines 59-67, col.12, lines 44-

46, table I, II, V).

13.   As per claim 61, Dolin taught the invention as claimed including an input/output unit for

use in premises automation, the input/output unit comprising:

a. A processor for controlling the operation of the I/O unit (col.6, lines 48-56;

control cells; col.10, lines 43-63);

b. A plurality of inputs operatively connected to the processor, at least some of the

inputs operable to receive communication related to a premises from premises-

based apparatus (col.6, lines 48-67, col.7, lines 1-2, col.10, lines 43-63); and

c. A memory connected to the processor, the memory encoded with program code to

enable the processor to control the operation of the I/O unit to provide input

aliasing by producing a plurality of Boolean results (col.10, lines 43-63), one

Boolean result for each of a plurality of entries, each entry further comprising at

least a first input identifier and applying a logical relationship to the plurality of

Boolean results to produce a single Boolean outcome for setting a storage bit as a

single virtual input representing a standard meaning for a state of the premises

(col.11, lines 59-67, col.12, lines 1-23, 44-46, table I, II, III, IX, XI).

14.   As per claims 8 and 12, 58, 62, Dolin taught the invention as claimed in claims 7, 11, 57,

61. Dolin further taught that the second operand in the least one of the plurality of entries is a

second input identifier (col.11, lines 59-67, col.12, lines 1-23).

15.   As per claims 9-10 and 13-14, 59-60, 63-64, Dolin taught the invention as claimed in

claims 7-8, 11-12, 57-58, 61-62. Dolin further taught that the second operand in at least one of

the plurality of entries is a stored value (col.11, lines 59-67, col.12, lines 1-23).

16.   As per claim 65, Dolin taught the invention as claimed in claim 15. Dolin further taught

that the second operand in at least one of the plurality of entries is a data structure including a

second input identifier (col.11, lines 59-67, col.12, lines 1-23).

17.   As per claims 66-67, Dolin taught the invention as claimed in claims 15 and 65. Dolin

further taught that the second operand in at least one of the plurality of entries is a data structure

including a stored value (col.11, lines 59-67, col.12, lines 1-23).

18.   As per claims 68, 70, 72, 74 and 76, Dolin taught the invention as claimed in claims 7,

11, 15, 57 and 61. Dolin further taught that the first input identifier is formatted so that the first

input identifier alone can specify any of a plurality of distributed inputs in the premises

automation system (table I, input bit temp_in).

Claim Rejections - 35 USC § 103

19.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

20.   Claims 69, 71, 73, 75 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Dolin Jr. et al (Dolin), US 5,737,529.

21.   As per claims 69, 71, 73, 75 and 77, Dolin taught the invention as claimed in claims 68,

70, 72, 74 and 76. Dolin further taught that the first input identifier is further formatted to

include an input number (table I, input bit temp_in). Dolin did not specifically teach the first

input identifier to include a unit number. However, Dolin taught in other input identifiers to

include unit numbers to control different temperature sensors (Table IV: sensor_1; sensor_2;

sensor_3). It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Dolin and include unit numbers in the first input identifier

in the temperature sensor control program to identifier different input temperature for different

location and control temperature accordingly.

Response to Arguments

22.   Applicant's arguments filed 7/17/2006 have been fully considered but they are not

persuasive.

23.   In the remark, applicant argued that (1) There is no logical relationship that produces a

single virtual input. (2) Dolin teaches away from the solution of Applicant's invention, which

provides an elegant way in which users can alias inputs together without having to write code or

understand underlying network protocols, and in fact without even caring or having to know

whether an input is local or networked. Inputs can be aliased according to Applicant's invention

with no network traffic occurring.

24.   Examiner traverse the argument:

As to points (1), Dolin taught a logical relationship that produces a single virtual input in table I

that:

        if (temp_in > on_threshold) temp_high = true;

        if (temp_in < off_threshold) temp_high = false;

These logical relationship produces a single Boolean outcome of either true or false (temp_high

is a Boolean variable). Dolin further disclosed in column 9, lines 59-67 that the Boolean

outcome (e.g. state of temp_in) may be used by a control program (i.e. for the virtual input). The

if condition clearly shows that this relationship is a logical relationship. Furthermore, the

Boolean outcome of either true or false represents a standard meaning for a state of the premises

since it shows whether the temperature is high or not.

As to point (2), in response to applicant's argument that the references fail to show certain

features of applicant's invention, it is noted that the features upon which applicant relies (i.e.,

provides an elegant way in which users can alias inputs together without having to write code or

understand underlying network protocols, and in fact without even caring or having to know

whether an input is local or networked. Inputs can be aliased according to Applicant's invention

with no network traffic occurring.) are not recited in the rejected claim(s). Although the claims

are interpreted in light of the specification, limitations from the specification are not read into the

claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

25.   A shortened statutory period for reply to this Office action is set to expire THREE

MONTHS from the mailing date of this action.

26.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968. The

examiner can normally be reached on 8 AM to 5 PM Tue.-Fri. and every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number

for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).